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approach

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GUEST

EDITORIAL

The End of Hopes and Dreams

By Lt. Tom Ganse

Approach has always been a good way to learn from others' mistakes, but the articles are usually written by people fortunate enough to be able to relay their own misfortunes, successes and philosophies. It's great to know procedures, but something is wrong if you still believe, "It only happens to them," or, "It's better to die than to look bad." Mishap investigation reports are too clinical, too procedural. Death needs a face to change an attitude.

"Children look so innocent and well-behaved when they are asleep," she thought as she peeked in on her two young children. They'd been in bed about an hour. She was waiting up for her husband to return from night flying. She took a seat in her favorite recliner and gently caressed her belly, contemplating the birth of their third child due in three months. It was almost 10:30.

"Just another long day in the life of a Navy wife," she thought.

She heard a car pull into the driveway. She got up to meet her husband at the door; instead, the doorbell rang. Hesitant and bewildered, she opened the door to find one of the squadron officers and another man she did not know. She tried to deny the fear their solemn faces drove deep into her heart.

Then the words came. "There's been an accident."

The following days were a torment—denial, the search for an explanation, the endless questions. Strangers pried into her personal life. "Did your husband buy life insurance recently? Did he ever talk of suicide? How was your marriage? What did he have for breakfast two days ago?

"I need you to sign these forms so we can get you your money. There seems to be an error on one of these documents. What do you want to do with the remains?

"Sorry, you can't have the service until the field investigation is complete. We'll let you know when it will be appropriate to have the memorial service. Have a nice day."

The memorial service came and went. The relatives came and went. The support groups came and went. Then she was alone with her children. A restless curiosity wrenched at her. She still did not understand. She didn't know how to answer her young son when he asked where Dad was. She needed to know. She needed to see for herself where and how her beloved husband had left her and the children. She arranged to visit the crash site.

It was a hard journey for a pregnant woman. The site was far from a road in rugged desert terrain. Still, she had to know, had to see first hand. When she arrived at the site, an investigator escorted her to the edge of the crater and showed her the various witness marks. She stared at the crater, a 14-inch deep, Hornet-shaped hole.

"Can I step into it?" she asked. "Is this where the engines were? Were these the wings? Where was the cockpit?"

Her escort explained what he could. He showed her where the cockpit had been. She stood for a moment, then crouched down and sat, as she imagined her husband had sat in the plane. She tried to imagine what he was seeing, what he was feeling, what he was doing, when his heart beat its last beat. She cried.

I wish I could finish this article by telling you this was a fictitious story.

Lt. Ganse flies F/A-18s with VFA-113.

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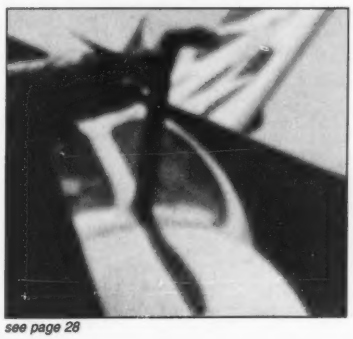

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On the cover: An HC-2 SH-3G Sea King delivers mail to a ship in the Arabian Gulf during Desert Shield. Photo by PH1(AC) Scott Allen

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RAdm. A.A. Granuzzo, Commander, Naval Safety Center
Bill J. Mooberry, Executive Director
Col. W.W. Scheffler, USMC, Director, Aviation Safety Programs
Cdr. John H. Christman, Head, Media and Education Support
Lt. Steven Halsted, Editor
Peter Mersky, Assistant Editor
Frank L. Smith, Graphic Design

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A Hog Meets Its Shadow (Almost)

By Capt. Thomas Longo, USMCR

Capt. Rick Mullen, USMC

One bright night—actually early morning—off the coast of Turkey, I was a second-cruise HAC leading a section of CH-53Es on an NVG troop assault in support of a large NATO exercise. We were in trail of five CH-46s, two AH-1Ts, and a command-and-control UH-1N. Each CH-53E was carrying three fast-attack vehicles, which look just like jeeps.

We were all qualified in low-light missions and after two-and-a-half months of no-moon ship landings, we were excited about flying NVGs with 85-percent illumination and a horizon. The wing crew chief and I had 100 hours of NVG time and the other people in my flight had about 50 hours each.

The previous night, we had rehearsed the assault up to where we went feet dry and we had all performed well.

Our crew day did not start until 2330. I rushed into the midnight brief because our aircraft was not signed off on time. The mission commander just highlighted the changes from the rehearsal. The biggest change was that we had to switch our transponder code every half hour after H-hour. This change confused everyone and my copilot asked me a hundred questions during the brief.

He wanted to know what to squawk before H-hour. As an old salt, I told him not to worry about it because we were supposed to be in standby until 0400. Who cared what was in the transponder?

He wasn't satisfied with that answer and asked the mission commander. I was insulted and embarrassed that my copilot didn't believe me and told everyone about our confusion. We all spent a long time discussing those codes.

I fine-tuned my brief from the previous night, and my section was ready for flight by 0215.

Just like the rehearsal, the Air Boss would not let us start our engines on time because the ship was in a turn. I had thought that this problem had been resolved, and I was angry that I could not talk to the Boss because we were EMCON. I made a mental note for the debrief. Because we were so late, I felt pushed and concerned about my section's success in the mission.

I briefed my crew chief that I wanted to be in the zone for no longer than 30 seconds. My wing copilot said he doubted we could disembark the jeeps so quickly. I accepted the challenge. I knew 30 seconds was a short time but I wanted to test my young crew chief. I wanted the jeeps started and running before we went feet dry. The last strap could be pulled as we touched the ground. The crew chief said that he would need at least 15 minutes warning.

We were lucky that both helos started with no problems. We launched about three minutes late. At 200 feet, my copilot engaged the bar altimeter hold and asked me if I wanted to switch to Center as briefed. He asked, "Button 3?"

The preset frequencies were improperly loaded so I said, "I don't know. Maybe button 3. Check the smart pack for the right freq."

He didn't use the "READ" function so we flew around in silence listening to Sigonella Ground. I made another mental note for the debrief.

The 46s launched on time, but my section had trouble joining on them because of the number of ships in the small bay. Fog was forming and disrupted our view of the 46s. The trail 46 was supposed to have its anti-collision lights on for safety and to help with the rendezvous.

At about four miles, I could only see the form lights on the flight in front of us. Finally, we saw the anti-smacks. As we closed, the lights went out. The trail 46 kept turning its lights on and off. Naturally, I thought that I had forgotten an important signal. I feverishly clawed through the smart pack, but I could not find the "smacks on, smacks off" signal. My anxiety meter was pegged. Later, I found that Dash 4 was trying to remind Dash 5 to turn on his lights. We had almost joined on the wrong aircraft.

The CH-53s pushed two minutes after the Phrogs. My copilot had seen the zone the day before, so I let him navigate. That violated one of my basic rules. When I am running the show, I like to make all the decisions. I figured that I could cheat by having him navigate. I was also going to show him how to fly tactically.

I had to remind him to give me altitudes, airspeeds and corrections.

The problems started as soon as we hit land. Because the fixed-wing traffic had been violating the 300-foot floor all night, I was flying at 200 feet AGL through rising terrain. My copilot started calling headings, and I had to remind him just to call right or left.

Then he started saying things like, "Watch that hill," and "We have a hill in front of us." I had to remind him to give me altitudes, airspeeds and corrections.

Surprisingly, I was very uncomfortable over land. I was shocked that as a second-cruise aircraft commander, I was having so much trouble with depth perception. I was very comfortable flying under low-light conditions off the ship, and this was the brightest night that I had flown in six months.

The route was short and easy, and we found the zone with no trouble. Unfortunately, the 46s were still on the ground.

"How's our timing?" I asked my copilot.

After what seemed like an eternity he said, "We are one minute and 40 seconds ahead of schedule." He had not thought about the timing and I had flown too fast. Quickly, I made a 360.

I never saw the zone. It was marked with lights, but we were high after clearing a ridge. The zone was on my copilot's side of the aircraft. The crew never said a word. The whole valley was clear and we could land anywhere. Confusion reigned as I just found a spot and landed. I figured that the grunts were in jeeps and they could drive to wherever they wanted to go.

I started my stop watch when we landed. After 45 seconds, I asked the crew chief if we were ready to go.

"No," he said, "the second jeep wouldn't start." I was

furious. Why did they wait to start? Why hadn't anyone told me about the problem?

Later, I was told that the first jeep ran over the crew chief's long cord and he could not talk to me. The first mech and safety observer never said a word.

At the two-minute mark, the lead Cobra called me to say that tanks were closing on my position. The first jeep was just rolling off the ramp. Dash 2 was waiting in a hover. We left after almost three minutes.

Angry, I pulled an armload of power and headed for the beach. The copilot kept saying that we did not have to be feet wet for 10 minutes. My mind reeled as I tried to remember the time line. I told him not to worry about the timing now because we could not wait over the landing zone that long. He did not seem to hear me and kept talking about the time line. I was wishing that he had thought about the time lime before we hit the zone.

The navigation back to the ship was easy because we were at one end of a huge tidal lake and the ocean was at the other. All we had to do was fly to the ocean.

My copilot had his head in the map and was describing some points near the coast. I was staring at the horizon trying to find the tower that he was talking about when I heard someone break radio silence.

"Altitude, altitude!"

I pulled some power and started a climb when the tail-strike horn beeped for a second, which is not supposed to happen when you are near the ground. I looked at the radar altimeter and we were at 50 feet instead of 300 feet. I really yanked the power. The crew chief said, "What are you doing up there?"

I thought that he was talking about how we almost crashed. Actually, no one in the back even knew what happened. The first mech and safety observer were all too busy trying to get the seats ready for passengers and the crew chief was trying to fix his long cord. They only spoke after the gravity storm knocked them on their tails.

Once I got my wind back, I just said, "Nice call" over the radio. Then we engaged the barometric-altimeter hold.

My wingman had almost followed me into the ground. The pilot at the controls had his eyes welded on me and the pilot not at the controls was reading his map. The wing crew chief noticed that something did not look right and questioned the altitude. The wing aircraft leveled at 100 feet AGL and only had time to say, "Altitude, altitude." He didn't use callsigns or side numbers, and 10 aircraft were airborne.

During the debrief, my copilot said that he saw five feet on the radar altimeter. My wingman said that my wheels looked as though they were touching my shadow. It was close.

I had used the NATOPS briefing guide and the squadron tactical SOP, but I had not briefed enough detail. I was fooled by the high-light level (85-percent moon illumination), and the fact that we had briefed and flown a rehearsal the previous night.

I let the crew concept fail, and as aircraft commander and section leader, I let myself become over burdened. I also failed as a leader because I did not force the crew to work as a unit. Obviously, I had not adequately briefed responsibilities for pilots at the controls and not at the controls. No one was monitoring the gauges.

> **My wingman said that my wheels looked as though they were touching my shadow.**

I considered the large tidal lake to be land. I should have engaged the barometric altimeter according to SOP for over-water flight. I could have flown closer to the shore and hills for better visual reference but the enemy was on the hill.

To compound the effect, on both my right and left, in my peripheral vision, the hills sloped into the sea. Not only did the lights in front of my aircraft remain fixed in my windscreen, but the visual cues which I was receiving on my sides remained the same. I never felt a rate of decent and certainly never felt like I was below 200 feet AGL.

I let my frustration cloud my judgment and distract my concentration from the immediate task at hand. If I was truly concerned about the timing and navigation, then I should have transferred control. My copilot and I had our low-altitude warning lights set at 150 feet. The wing pilots had set theirs at 125 feet. With the blue-light kits installed, no one noticed the light. CH-53s do not have a low-altitude warning system (LAWS). As a squadron, we brief the importance of an instrument scan while flying on NVGs and not one of the eight available eyes noticed the altitude. ◀

Capt. Longo is an instructor at VT-10 and Naval Schools Command.

Plane Captain in the Water?

By LCdr. Mark Lundgren

We were about to taxi out of the hot pits on a dark and misty night. The plane captain was going through the pre-taxi checks. He started directing us forward, away from the pits, as he backed up toward the edge of the seawall. In the dim light it was still easy to see him checking over his shoulder every few steps ensuring he would not walk off into the cold dark water on the other side.

As my copilot and I watched, we wondered, "Has anyone ever walked off the seawall?"

With years of experience I answered that the question had been asked before and I didn't know of anyone having done it in the past. Our plane captain stopped and, as he signaled for us to turn away from the pits, he disappeared from sight.

I wondered if the plane captain could read minds and was playing a practical joke on us for even thinking he could fall off the seawall. Then, as my copilot and I both said, "You have to be kidding!", the plane captain's wands came into sight barely above the edge of the seawall. Stopping the aircraft and confirming that the plane captain had, in fact, fallen off the seawall, we thoroughly confused maintenance control with a radio call of "Plane captain in the water." The other members of the pit crew quickly arrived on the scene and pulled him back onto land.

If we had asked how to prevent the incident instead of just wondering if it had happened before, it might not have happened in the first place. ◀

LCdr. Lundgren flies with HS-7.

Soon after this incident, a black-and-white stripe was painted on the ramp to warn people when they were approaching the wall.—Ed.

Don't Fear the HFB

By Lt. Steven Halsted

How do you know when someone is overstressed? A difficult question to answer when your day-to-day business involves high-stress duties, such as those in aviation. In fact, in 102 Class A mishaps since 1977, flight surgeons identified "a preoccupation with personal problems, interpersonal tensions or inadequate stress coping" as contributing factors.

Life stressors include performance requirements, mission factors, physical environment, and personal problems. Enough stressors can create insidious fatigue even if the individual is apparently coping well.

We must find ways to prevent human-factors-related mishaps. The Naval Safety Center has worked to implement a system to better monitor aircrew. Human Factors Boards and Councils are part of that system.

Both programs have existed for some time, but there has been some confusion throughout the fleet about how they work. A new instruction (5420.5A from CNAL and 5420.2 from CNAP) defines the composition, and use of Human Factors Boards and Councils.

Human Factors Councils are regular meetings to detect the effects of excessive stress on aviators. They are informal reviews of each aviator's training jacket and log book, including NATOPS checks, instrument quals, bombing or ACM scores.

The council will include the flight surgeon, safety officer and additional officers of the CO's choice. They will discuss the aircrews' progress, personal life stressors, and personal problems in a non-punitive setting. The goal of a council is not a pre-FNAEB, but an attempt to aid the CO in keeping his crews safe, qualified and proficient. The information is kept in confidence and cannot be used for disciplinary action. Such use would stop the free flow of information. No minutes or written reports are required.

A Human Factors Board includes the same people as a Council, but is convened for cause to review an individual's situation. It has the same purpose as a Council but the findings may lead to an FNAEB.

Most of the time, mishaps attributed to human factors could have been prevented, if someone had spoken up sooner. A skipper is responsible for the safety of his people. Good leadership requires good communication. HFCs and HFBs provide a forum to learn more about your people and protect them.

The following articles provide a look at the human-factors review process from the viewpoint of a student being reviewed and the participating flight surgeon. ASOs have to deal with rumor-filled suspicion about HFBs that is based upon a lack of knowledge and natural skepticism about the human-factors process. These articles provide evidence that the system works for the benefit of all concerned. Not every HFB will have the same happy ending, but if lives and assets are saved everyone benefits.

Read the new instructions and the articles for a better understanding of this program. ◄

A Human Factors Board for Me?

By Ens. Gerald R. Hermann

I was in shock from the moment I was told that I was to be the subject of a Human Factors Board (HFB). All I could think necessary was, "What am I going to do now that I'm going to be kicked out of the Navy?"

I had never been to an HFB, so I had to rely on rumor as to its nature and purpose. Naturally, I expected the worst. I was having problems making certain life-style adjustments. I had recently married, acquiring an instant family (a wife and four-year-old daughter). We were also expecting a child. Our residence was on the "Texas Riviera", closer to my new in-laws than primary training. I was commuting when I didn't have a flight, and staying in the BOQ when I had an early brief or late event.

I thought my personal life wasn't affecting my job performance—that is, until I failed a NATOPS test. I thought that this lapse was just a fluke. However, a few days later I received a ready-room down. Suddenly, I found myself struggling just to remain in the flight-training program.

The HFB convened in the NATOPS Office. I walked in to find the safety officer, the flight surgeon, the assistant operations officer and another instructor pilot.

The safety officer made the first comment. "Relax! We asked you here to find out what's wrong and how we can help you with it."

We discussed my problems. More importantly, we devised a plan that would help me decrease stress in my personal life. The board told me to check with the local housing office to see if housing was immediately available. The members also directed me to visit Family Services for job placement for my wife, and the base Child Care Center to check on prices and availability.

I visited the local junior college to check on their transfer policy, and checked with the naval hospital for family counselling and stress-management groups. The board also encouraged me to bring my wife to visit the ombudsman, the CO's wife, and another student's wife.

They took me off the flight schedule for one week to get it all done. After that, I met with the safety officer for a follow-up discussion. I told him things were improving rapidly, with my personal life and at work. Now, after four months, I am amazed and thankful at how the HFB helped me iron out my problems and continue flight-training.

How to Save an Aviator from Himself

By Lt. Henry B. Kaplan, MC

A student naval aviator who had been above average was now on the verge of washing out. Just five months after I graduated from the NAMI flight surgeon's course, I was called to serve on his Human Factors Board.

The squadron safety officer briefed us on the student's status. We had to identify the stressors that might be preventing this student from completing training. Then we would make recommendations to help him relieve the stress. We were there to help, but at the same time, we were not going to parent this guy and tell him how to solve all his problems.

Initially, the student was reluctant to admit that anything was affecting his performance. Gradually, he answered the questions and a true picture formed of the pressure he was under. During the discussion we found that he had just married a woman with a four-year-old daughter, lived 60 miles from the base (which contributed to fatigue), and that his wife was working, going to school and was pregnant. Talk about legitimate life stressors. No wonder he was having trouble concentrating.

Everyone on the board offered suggestions to help this student relieve some of his stress. We provided the student with tools to get himself on track and go on to complete the flight program. The success of the board can be best summed up in the students own words. "The Human Factors Board turned my life around."

One Down, One to Go

By Lt. Paul Buck

Just another day on board USS *Ranger* (CV 61). The air wing was en route to the North Arabian Sea in support of Operation Southern Watch. A couple days past the Straits of Malacca, I briefed a late-afternoon section hop. It consisted of bombing, strafing, and 1 v 1 similar ACM. It was a 1+45 cycle and the last day event—the perfect JO hop.

After a Case I launch and a quick rendezvous overhead, we headed toward the spar being towed by the smallboy, about 60 miles to the north. Unfortunately, the fighters in the two previous cycles with a similar mission had sunk the spar, so we just targeted the wake of the frigate.

Everything went fine with about a 10-minute delay as our sister squadron cleared the pattern. After three successful Mk-76 drops and six strafing runs, the lead called in hot for the final run. Then it happened. Just past the abeam position with approximately 120 degrees to go to roll in, the right engine stalled. Working the 30-degree dive strafing pattern, we were at a comfortable 8,000 feet and 280 KIAS. Although just a nugget in the squadron, I have heard the TF30 engine cough a few times before. After unloading the aircraft and retarding both throttles to idle, I glanced at the engine instruments. The TIT was pegged at 1,400 degrees. I immediately secured the right engine.

We then turned south, headed for home, and told our lead that we were single engine. Controllability was not a factor at this point. Once the bi-di checked good, the next major decision was whether to try to relight the right engine. Back at Miramar, we would have returned single engine since the stall was not pilot-induced and the TIT was so high. However, with no other abnormal indications and working blue water ops, the risk of possible problems in restarting a potentially bad engine was not high enough to convince either myself or my RIO that we should make a single-engine approach. Unfortunately, I had two unsuccessful restart attempts. On both tries, the cockpit indications were all within parameters for a restart—rpm above 20 percent and TIT less than 300 degrees.

PH2 Dennis Taylor

At this point, it seemed as though everyone wanted to talk to us at the same time. Although all the advice was good, the radio chatter became intense. We tried to keep confusion to a minimum and logically step through the procedures.

After discussing the option for a cross-bleed start, the ship made an aggressive decision to take us aboard immediately since sunset was rapidly approaching. Given that fact, I nosed it over for one last restart attempt inbound. Same result: no relight.

Ironically, not three weeks earlier I had briefed the squadron on single-engine approaches. Luckily, the game plan was fresh in my mind. Obviously, the goal is to fly a rails pass, but keep some common pitfalls in mind. With the engine mounted 4.5 feet off centerline, large throttle movements create difficult lineup problems. A good start with a stabilized power setting is the first goal. Second, faster is better. This gives the aircraft better rudder response from the increased airflow over the tails as well as less asymmetric thrust from the lower power setting required during the approach.

Third and most important, do not put yourself in a situation to work off a high ball. With the slow spool-up time of the TF30 engine, it cannot always stop the high sink rates of the F-14.

Enough philosophizing. Fuel had not been a concern to this point. For fly-away characteristics, we knew we wanted to be light, at the same time weighing the possibility of multiple approaches.

After getting down to the appropriate gross weight, I picked up the silhouette of the carrier at about seven miles, but I couldn't distinguish its aspect. We had a discrepancy between the bullseye (ILS) and the ship's TACAN. With a timely call from our spare on deck in the next event, we were able to correct over to the final bearing. As in all Case III approaches, getting lineup squared away early was paramount. Unfortunately at 4 DME, we still couldn't pick up lineup visually, and the ship called out, "Mother is in a right turn." I aggressively corrected to the left to intercept the new extended centerline. Not 30 seconds later, the ship called out a left turn. I imagined they were searching for wind down the angled deck and corrected back to the right.

Not exactly sure where the new projected lineup would be since the bullseye was not steady, I asked for the drop lights to be turned on. As the lights came on, we were at two miles and the ship started another right turn. I was doing exactly what I had hoped not to do: chase lineup all the way in.

"Paddles contact. Level your wings. Ship's in a turn."

I leveled the wings and double checked gear down, hook down, and present airspeed. The angle of bank in my turns was destroying lift in an already underpowered situation. Fortunately I had erred toward 10 units vice 12 units AOA until on final.

"Ship's steady. Bring it left; you are lined up right," the LSO called.

All right, I now had good visual cues and just had to worry about meatball, lineup, and angle of attack.

Things were a bit calmer in the cockpit from the timely and accurate calls from paddles, which helped me get to a good stabilized start, on glide slope and on lineup. In the middle, I was still on and on, but fast even for the targeted 14 units AOA.

The airplane yawed every time I moved the throttle. I corrected for a little left drift in close. Safely crossing the ramp, I adjusted the power to ensure coming down in the wires. I would also avoid a bolter over-the-top and the tendency to go fast nose-down in the wires while correcting for a high ball in close and a hook-skip bolter. The F-14 notoriously hook-skip bolters on both last-minute lineup corrections and nose down in the wires. The latter comes from the drastic change in hook-to-eye ratio.

As we approached the wires, the LSOs gave an attitude call to set the hook. However, upon coming up to military power on touchdown, the operating engine stalled with the accompanying stall warning light and aural tone indications. My only thought was to simultaneously call, "Left engine stall... eject, eject, eject!" and try to keep the proper fly-away attitude to minimize sink rates. I would hope there was still enough thrust to get us away from the deck as my RIO pulled the handle.

I clicked the mike to make my call when suddenly, I felt that reassuring tug and knew we had made it home. Coming to a complete stop, I retarded the left throttle to idle at which time the engine stall cleared.

This approach taught me how important full rudder deflection is when coming up on power at touchdown. I had a good amount of rudder deflection and even though I landed on centerline, I still rolled out about two feet to the right of centerline. The maintenance department found that the high-pressure compressor (N2) had seized because the No.4 bearing had failed. So even though the rpm was good on the gauge, which reads off the Nl low-pressure compressor, the engine would never have started. The most important lesson that this incident revealed was the need to know when to eject, and if that situation arises, not to hesitate. With the stall of the second engine, if we had skipped the wires for any reason, we would have been out of options. We were lucky to be safely back on board. ◀

Lt. Buck is a pilot with VF-2.

L☼☼k Out, L☼ ☼k Out!

By LCdr. Joseph Zerbo

The initial mishap report could have read something like this:

Aircraft hit the ground in landing configuration at 70 degrees angle of bank, 25 degrees nose down attitude after right wing struck radio tower on final approach. Thus far, no evidence of any mechanical failure.

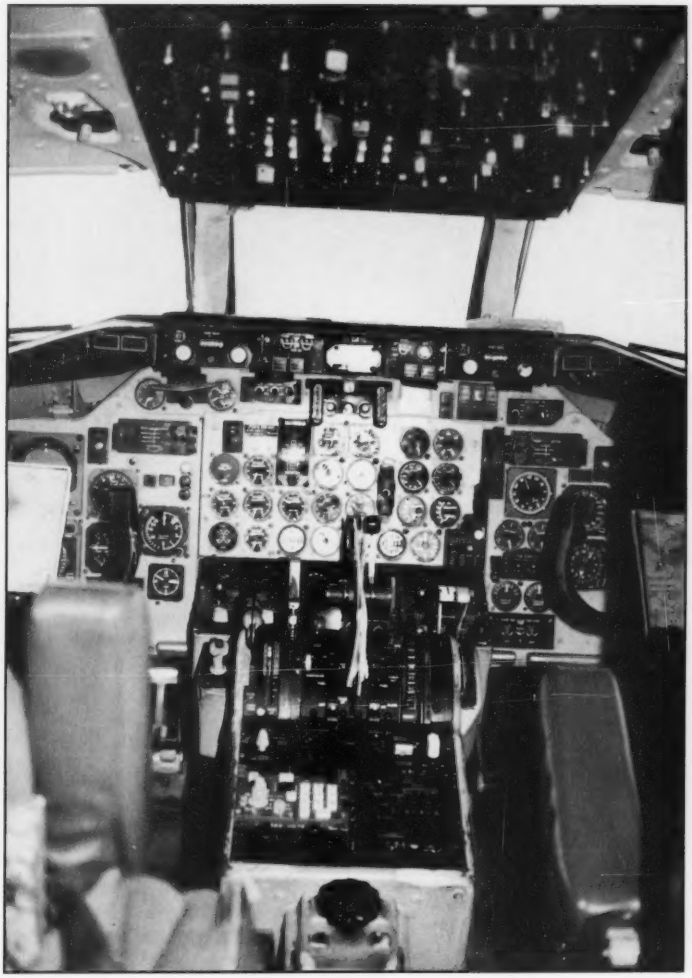
Fortunately, there was no mishap. The event had started out as a short NALO mission: 1300 brief, 1500 departure, and a 2100 return, call sign JT 036.

We were to fly to Orlando International to pick up 75 NJROTC high-school cadets and their escorts. We left NAS Willow Grove. My copilot (an ex-Marine A-6 driver) took the flight to Orlando, which went smoothly except that we had to maneuver around heavy rain showers in the approach phase. I flew the return nighttime leg back to Willow Grove.

The reported field weather was 3,000 scattered, 5,000 overcast and visibility five miles. We were being vectored for a PAR to runway 33 with a request for the visual approach. There were several other aircraft on the frequency; we had a visual on two of them in the GCA pattern on a left downwind abeam the field.

At approximately seven miles from the field and 2,500 feet MSL, we had the runway in sight and were cleared for the visual.

The controller had said, "Navy Juliet Tango 036, two C-130s departing cleared for the visual runway 33. Contact Tower." There was a little confusion as to what the first half of the transmission was. We decided that it was probably the traffic we saw on downwind. We rogered the clearance and switched to Tower. Tower cleared us to land. At approximately 2.5 miles from the field and 1,000 feet AGL, the copilot, looking out his forward window, saw what appeared to be a large aircraft. He believed that we were on a collision course. At first, he spoke loudly, "Look out, look out!" Then he screamed the command, "Dive, dive, dive!"



Joe Casto

On his first call, I noticed the on-coming aircraft, but did not immediately get the same impression. When he yelled to dive, I lowered the right wing as I pushed the nose over to lose altitude. Keeping my eye on the traffic, I didn't think we were in conflict. We leveled off about 200 feet below our initial altitude. We had avoided the apparent collision. When the copilot asked the distance to the traffic, the Tower replied "Three miles." Still fairly shaken, we corrected to the runway, made the standard visual approach callouts, and landed.

During the taxi, we briefly talked about the incident. After shutdown, we briefed our passengers about the deviation on approach. The copilot, crew chief, and I discussed the illusion. It turned out to be two C-130s that had departed from runway 33. As they made a tight right turn toward us, their landing lights made them appear to be one large aircraft. As they separated, that "one large aircraft" gave the illusion of constant bearing and rapid closure. The copilot said he was convinced we were going to have a midair collision and was going to grab the controls if I did not respond. The illusion was so real that he was not sure that maneuvering would have prevented a midair because of the rapid rate of closure. I was unsure of how close the oncoming aircraft was.

Know your environment. There are many fields with towering obstacles both abeam and below on final approach. Clarify any communications with ATC. We may have been better able to resolve the visual miscues if we were prepared to look for the C-130s. Strive to maintain standard calls during the approach. When the situation deteriorates, relying on your standardized practice of calls at 1,000 feet, then 500 feet can stabilize things by drawing your attention toward flying the aircraft. As a side note, we found out from the flight attendants that the NJROTC cadets thought we did the maneuver for their enjoyment. Their escort, a fellow naval aviator, knew otherwise. ◄

Thanks to ACC(AW) Michael Pitts for retrieval of the ATC tapes. His efforts allowed us to better understand the encounter we had.

LCdr. Zerbo is a C-9B instructor pilot with VR-52. He is a 747 flight engineer for a civilian airline.

Our *Chinese* Fire Drill

By Lt. Chris Fitzgerald

Our ship, USS *Elliot* (DD 967), was steaming independently in the SOCAL warning area. We had been tasked with a good-deal day VFR flight, departing at 1400 and returning later that night for an acoustic exercise and recovery at 2100. We briefed to launch, return to homeguard for some parts and gas, and then continue to fly until 1900, our scheduled overhead time for the acoustic exercise.

After launch, we flew the 20 miles back to North Island. The weather was CAVU and our trip was uneventful. We landed, shut down and began to do all the things LAMPS guys do when at homeguard for a few hours. We stuck our head in the skipper's office, razzed some JOs in the wardroom, went to our favorite fast-food restaurant (saving it to make everyone onboard jealous), and got some newspapers. We also mailed about 2,000 letters. It's funny how everybody becomes your buddy when you are going to the beach, but it's tradition; happy shoes are friendly shoes.

We launched from homeguard at 1745 and proceeded out to the warning area, where FACSFAC told us that our ship was exiting the harbor en route to the Quick-Draw area for our event. We took this opportunity to put some buoys in the water around a unit to ensure all of our acoustic systems were 4.0. Everything worked perfectly, which meant another case of sodas for our maintenance guys.

We were happy. We had an airplane full of gas with everything working, and we were on station watching a beautiful southern California sunset as we waited for 1900 and Comm Ex.

Elliot contacted FACSFAC, confirming their hot area assignment and got a discreet squawk for us. They passed the squawk and other pertinent information to us via data link.

"Wow, these shoes are really good!" I said. "This is going to be a piece of cake. I wonder what the movie is tonight."

At 1900, the beautiful sunset was gone and had been replaced by a very dark night. Visibility was unrestricted, but there was a scattered-broken layer between 500 and 800 feet with no moon. We were at 1,000 feet and planned to descend to 500 feet to deploy our ordnance for the exercise. We held several contacts on radar. Nothing looked too important, except a contact coming up from the south, which would pass astern of our ship that was heading west. We maintained position three to five miles in front of the ship so we would be ready at a moment's notice.

The ship was entering our designated hot area, the tactical picture was developing and we were two minutes from dropping ordnance. We were busy listening to data link plus two radios when we heard a faint voice. We listened—there it was again, on guard.

"Aircraft squawking 4510 at Angels 1, you are three miles from U.S. ship conducting air operations. Head north immediately."

We immediately scanned the surface through the now-broken layer and saw an aircraft carrier.

"We're right in the middle of the CQ pattern, looking down the angle from the wrong end," commented the right seat while turning left and descending.

"Yeah, but we're only three miles from our ship," was the response from the left.

"ATACO-ATO, you got a carrier on the port beam for five miles. We're bustering north."

The left seat wondered aloud what everybody was thinking, "What's going on? Why is a carrier busting through our hot area? Where did this guy come from?"

As we leveled off at 500 feet, 160 KIAS heading north, the aircrewmen asked a typical AW question, "Sir, do you think we should tell the carrier to get *their* airplanes out of *our* airspace?"

All three of us sat quietly, contemplating if we should ask to experience the polite and jovial banter usually heard from the Air Boss, a privilege usually reserved for our fixed-wing brethren. Discretion being the better part of valor, we headed south to open the carrier and continue the exercise.

Nervous laughter and off-the-wall remarks followed as we all wondered how such a peaceful night flight could suddenly turn into such a Chinese fire drill. (Remember the 99-percent boredom, 1-percent terror rule?)

Recovery aboard *Elliot* was uneventful. The debrief provided some interesting facts.

- The carrier's presence was never relayed to us by our ship or FACSFAC.
- Our ship was assigned an exclusive hot area for the event by FACSFAC.
- FACSFAC instructed all units, including the carrier, to remain 10 miles from the destroyer.
- The carrier contacted the destroyer. They agreed that the CV would alter course to go behind the DD and remain at more than 10 miles from the destroyer and clear of the hot area.
- The carrier changed course to cross in front of *Elliot*.
- Discussion as to whose airspace took precedence was heated. OPNAV 3710 and the CV NATOPS do not discuss airspace precedence, but NWP-42 says that the carrier's airspace took precedence [NWP-42 (Rev. I) 6.3.1.1]. However, the carrier was operating without authorization in a hot area designated for exclusive use by FACSFAC for the small boy and its aircraft.

We were unaware and too comfortable with what we were being told. It is scary to think what might have happened had an F/A-18 come out of the goo right below us. Helicopter pilots need to know when a carrier is anywhere nearby.

Wardroom discussion led to another topic closely related to the issue of small-boy airspace: flybys. The fixed-wingers love to say hello and usually do so unannounced. The next day while we were in the pattern around the DD, an F-14 at approximately 500 feet made several passes down, around and over our ship before he finally noticed our helicopter at 400 feet and 1 mile, and departed. I have heard many a sea story from helo pilots about being under-flown or having near mid-airs while in the pattern of a small boy operating near a carrier.

If you consider yourself a morale booster for fellow sailors at sea, remember that air-capable ships (FFGs, DDs, DDGs and CGs) may be operating helicopters. If they are, their ATA and control zones are in effect. Keep a good heads up, try land launch freqs, and look for the Hotel flag on the first pass. ◀

Lt. Fitzgerald flies with HSL-49's Det 5.

Psst: ▮ *Ed.*

PH2 Bruce Trombecky

Do I Believe the Yellowshirt?

By Lt. Peter Holden

Back at the boat, the first night CQ always promises to be interesting. While most of the "fun" usually occurs in the air, especially behind the boat, just getting off the deck can prove to be almost as challenging. We were operating off the East Coast on our first day of REFTRA, during which growing pains between the air wing and the ship are common.

My pilot (a CAT 1) and I had completed day CQ and were manning up for the night event. The new flight-deck crew had spotted us on the starboard side, aft of elevator 3. At first glance, this seemed odd. I had previously made a full set of work-ups and a cruise, and very rarely had the deck crew spotted a Prowler that far aft of elevator 3. They had also spotted a second Prowler just forward of ours. The skipper and his crew manned that one.

A recovery was in progress as we preflighted, and the nose of our jet was just behind the foul line. Because of the position of the aircraft, we were one of the last to start and the plane captain had to give us the starting signals from the right side of the aircraft. This was unusual since the pilot could not see the plane captain.

After a normal start on the right engine, I saw a yellowshirt run across the landing area right up to our jet. He was waving his yellow wands like a madman as he came toward us. He stopped on the right side of the aircraft, looked up at me and waved his wand wildly underneath his chin. I told the pilot that he wanted us to secure the engine but I was not comfortable following the yellowshirt's direction.

...I saw a yellowshirt run across the landing area right up to our jet.

At this point, confusion began. We all knew the flight-deck crew was new; their mistakes had been obvious earlier in the day. We had only one engine turning and shutting it down would have further delayed or even jeopardized our launch. The actions of the yellowshirt were erratic, almost irrational.

Besides the yellowshirt's actions, the plane captain was crossing his wands, telling us not to secure the engine. The yellowshirt then disappeared underneath the aircraft. At that time, the skipper called on base frequency and asked us which engine we had turning. Only later did we discover that the yellowshirt had gone right up to the intake of the turning engine and shoved his wand straight into it to see if it was turning!

The yellowshirt reappeared and again frantically signalled to secure the engine. Once again, the plane captain countered the yellowshirt and signalled to hold. This time, the two got into a shouting match. When the yellowshirt looked up again he was still hysterical. We finally decided to secure the engine. We were quiet, dark, and confused. We didn't know why we were there and it was too late to ask the Boss.

After a short trip in a dark, quiet jet attached to a tow bar on a pitching deck, we started, launched, and recovered without incident. Later, we found out that where the jet was originally spotted, the Prowler exhaust blew directly into the catwalk where the arresting gear crew was stationed. The gear crew was unable to reset the cross-deck pennant so the recovering aircraft were repeatedly being waved off for a foul deck.

Is the yellowshirt always right? When an aircraft is broken down, there must be a yellowshirt present to assume control. He has awesome responsibilities; anyone who has had their nosewheel taxied to the deck edge and has looked down at the water can attest to that. Sound knowledge of NATOPS should combine with a yellowshirt who knows his job. ◄

Lt. Holden flies with VAQ-137.

There are several errors here. First and foremost, the aircrew should have shut down immediately when the yellowshirt signalled. Directors usually have very good reasons to make this call. Second, the turning Prowler should not have been spotted aft of elevator 3 during a launch and recovery. And third, the yellowshirt definitely should not have poked around the intake.—Ed.

He Won't Be C

By Lt. D. Brady Muth

It's 0230 and I have just given my two-year-old insomniac a quick rerock and reload of diaper ammo. She's asleep again, but my wife is snoring, and Bowser is hogging the bed. Uh, oh, there goes my head again. Where is that harp music coming from? Once more, I'm stuck on that bad night, eight-and-a-half years ago. Paperwork has always made me sleepy and I don't have a NATOPS to read. Maybe I can write that *Approach* article I have been thinking about for so long.

After my stellar performance in the training command and some money for the detailer, I had been able to get my fifth choice: flying TA-4Js at Rosie Roads. One day, the Ops O said he was sending me and another JO to Gitmo with two airplanes and three enlisted people to support an Orange Air exercise. We would be hosted by the VC bubbas stationed there.

So there we were, on our first det. Berthing and working spaces were arranged and we had an idea what we were going to fly the next day.

"Hey, y'all want to fly tonight?" somebody said. "I know you just got here. If you're too tired..."

"Yeah, we'll fly," we said. "Too tired? Us?"

"OK, the ship is way out there. This is a 15-plane strike. Here is the ROE, the freqs; you won't need coordinates. Here are the spinning TACAN channels; you will need those. Here are the ALTREV procedures."

"The ALwhat?"

We briefed and even talked about who would lead and what our bingo would be. It was a beautiful night with a full moon. Somehow we found the ship. These spinning TACANs are neat.

"I'm bingo," lead called after a few runs. Our bingo fuel had a lot of gravy built in and this is not a gas story. There were huge cumulus clouds and rainstorms 50 or 60 miles from the field, but no thunderstorms. We were in and out of very dark rain storms and very bright, clear skies with a large vertigo-inducing moon at a weird angle.

Now we were completely IMC, and San Juan Center gave us a left turn and a descent for a couple thousand feet. I didn't feel us turn to start the descent. A quick glance at my heading and altitude confirmed my feeling. I asked my lead if he was going to turn. He answered "Yes." I was on his left side when we went into a big left turn. A bunch of "hyaccas" later, I asked him very excitedly what he was doing.

"I've got vertigo bad," he replied. "I'm gonna climb out of this stuff."

I immediately started thinking. We were under positive control, we couldn't change altitudes, the weather was bad, and there were airplanes everywhere. How high was he going to climb? I would look good as a Blue Angel.

He went to full power and I went sucked. A quick glance at my AJB3 told me I was in a 90-degree left turn, with my nose falling through 10-15 degrees, nose down. I rolled wings level, pulled my nose up and watched my lead's tail light cross my nose from right to left in what appeared to be a left roll into at least a 40-degree, almost inverted dive. He disappeared into the night. I yelled at him to get on his instruments.

"I am," were his last words.

I saw my VSI go from a pegged 6,000-fpm descent to a pegged 6,000-fpm climb. Good. I found my AJB3: 40 degrees nose up, wings level, bad and good. I found my airspeed indicator: 150 knots, bad. I found my altitude: climbing through 9,000 feet (we had started this evolution at 13,000 feet), bad but getting better.

I pushed forward on the stick but it wouldn't move. The controls weren't binding, so it must have been mental. Finally, I leveled off at 15,000 feet with my airspeed under control. I tried to call my lead a few times

but got no answer. I called San Juan Center, and after some confusion about my transponder, who I was and what my problem was, I declared an emergency and was finally on my way home.

Now I had to find my approach plate and figure out how to fly the approach. When I made it back to the field, our three-man maintenance effort was waiting in the rain to catch us.

"Hey, ensign, where is the lieutenant?" they asked

"Uh, he won't be coming back," I said. "I think he crashed." The only bright spot of that terrible night was our host squadron SDO who grabbed me, grilled me for information to help the SAR effort and sent me to the right places and told me to make the right phone calls. The SAR was unsuccessful.

The next day the skipper and the rest of the squadron heavies arrived. I had my back-in-the-saddle hop and my squadron got on with the mishap investigation. The most amazing thing about the whole incident was what I heard in the club and around the BOQ the next day: speculation about my dead squadronmate's ability to fly and our professionalism. Rumors about night ACM and poor judgment. I heard two O-6s talking about it in public and an A-7 squadron CO who had all the answers.

People who should know better had the biggest mouths. Lessons learned? Always have your nav pubs ready, don't blindly trust your flight lead, and be ready to back him up. When you have vertigo, get on your instruments. If it is so bad that you are saturated, just flying straight and level, don't try to turn, climb, squawk, talk or anything, until you get your personal gyros recaged. And the next time there is a mishap, keep your mouth shut and your opinions to yourself. You never know who is listening. You can only make yourself look stupid and unprofessional, and you could end up hurting someone.

I also learned one more thing. Two weeks later the senior enlisted man on the det asked me to talk to the mishap pilot's plane captain. Apparently, this very junior, very competent sailor hadn't been sleeping well since the mishap. Considering the mishap board's questions and my handling of the situation that night, this airman thought he was responsible for the pilot's death. We pilots aren't the only ones affected by mishaps. A few minutes of explanation could have gone a long way to ease that plane captain's mind. ◀

Lt. Muth is a TAR with VFA-204.

Communication

The Trouble with Professional Courtesy

By Maj. Peyton Dehart, USMCR

When will professional courtesy get you in trouble? Though you normally can't get "dinged" by being courteous, excessive professional respect almost led me down the path to a mishap.

I was flying a forward air control mission over 29 Palms. Good crew coordination dictated that I direct most of my attention to the business of flying at low level while my copilot carried primary responsibility for navigating and operating the radios. We were low, fast and busy.

We were two of the most experienced pilots in the squadron and held key billets in the safety shop. We had flown with each other (in the same aircraft and on each other's wing) on numerous occasions; we knew and respected each other's abilities.

I was headed east over a relatively flat, featureless piece of terrain and asked my copilot to call my turn to the north (to avoid a hot range). Since we were intently listening for ground transmissions, we adopted a "consent by silence" rule (or so we both thought). I knew my copilot to be an excellent navigator and thus, we would be right on the money. I waited for his call.

I didn't know that he had told me to turn... a few times ... a couple of miles back. When I didn't turn, he assumed that I had a new and better idea but didn't have the time to tell him about it. In fact, the intercom had failed at that moment.

Both of us felt like there was a communication required, both of us made a few attempts to talk to the other, and both of us assumed the other competent aviator was handling something higher in priority. Both of us were wrong.

Even though we had briefed lost communications, we hadn't discussed how we would recognize the onset of lost communications (i.e. "We have lost communications if I fail to respond to you within five seconds ... even if it is only a grunt").

We finally realized our situation when we saw the nearby muzzle flash of a 155mm artillery piece. We both said, "Holy smoke!" and asked each other what was going on. With no response, we yelled above the whine of the transmission gears, figured things out and gave wide berth to the gun emplacement.

Both of us wanted information and both of us were transmitting correct information. Communication wasn't the overriding problem; it was excessive professional courtesy. We took each other's silence as an indication that the other had a better idea.

Brief how you will acknowledge transmissions and then speak up and ask pointed questions if things don't feel right. Courtesy will get you far in life. It might get you all the way to the end of it! ◀

Breakdown

Rick Mullen

You Got the Wolfman, Jack!

By Maj. Peyton Dehart, USMCR

In the attack-helicopter community, we have a classic riddle that we ask new guys: "What's the most powerful asset on your helicopter?" After the new guy rattles off a number of highly lethal, big-bang weapons, we give him the answer: "the radio."

With a radio, we can communicate with entire squadrons of bombers, naval gunfire, or any of the many supporting arms that are available. Each of us has the potential to use that power. We spend lots of training time trying to perfect our communications abilities.

One area we sometimes gloss over is our personal communication ability. Research on communication shows that the originator puts out an idea through a filter of personal experiences before saying the message. We need to consider our copilots' backgrounds.

I found out how thick the filter is during a flight in a training squadron. I asked the new student to dial in 690 on the ADF. Those from southern California will recognize that as the oldies radio station that Wolfman Jack worked a couple of years back. After a minute, I wasn't hearing anything so I asked,

"Did you dial 690?"

"Yes sir, I don't hear anything though."

"Well, sweep around there to find it."

"Excuse me?"

"You know, dial the knob either side of what's displayed. Sometimes the radio is a few numbers off."

"Excuse me?"

I then realized that this person had grown up in a digital generation. If the dial read 690 then that exhausted the options for finding the radio station. I had never considered the possibility that my copilot might not have grown up using dial-operated, tube-warmed equipment.

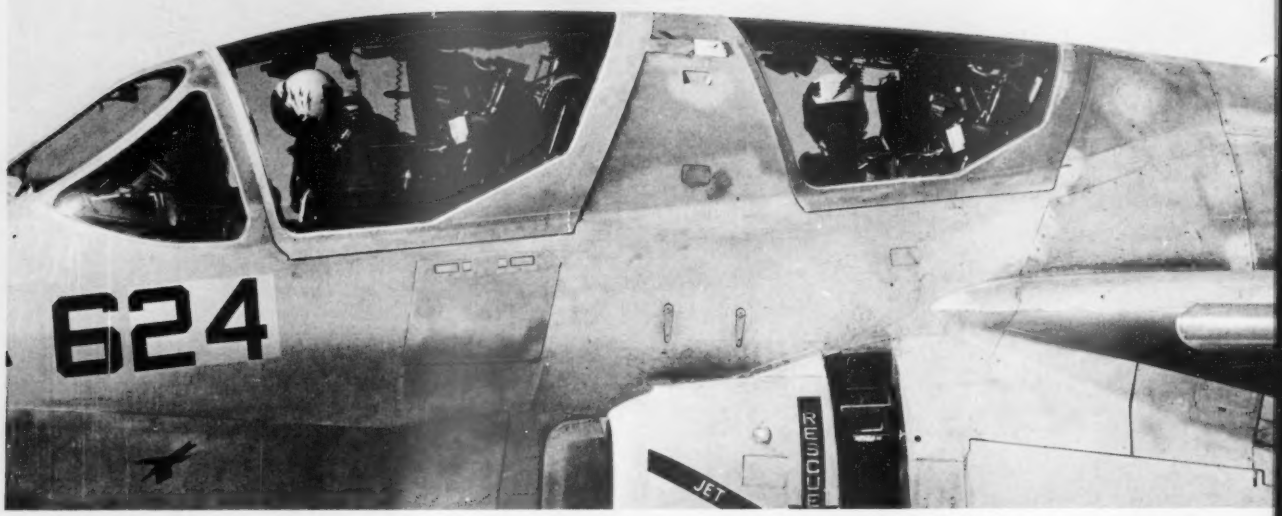
What cultural filters do we carry? Can we be sure that the information that is received and processed is exactly the same as what we sent? Communication is powerful. Let's make sure that what we communicate is what is understood. ◀

Maj. Dehart flies the AH-1 with HMA-775. He was *Approach's* Contributor of the Year for 1992.

Prowling Through the Fog

By Lt. Bradford L. Botkin

PH3 Tom Gibbins



We were scheduled for a morning low-level hop in the great Northwest. During the brief, we discussed crew coordination and ICS comms for possible emergencies on the runway and during the low-level. We paid particular attention to traffic calls and lookout responsibilities. Weather on the route was forecast to be CAVU, but it looked as if fog at the field might prevent us from launching

Since ground fog is often present at our field during autumn and winter, and frequently burns off or moves offshore suddenly, our crew decided to man up and taxi as briefed. After completing the line checks, we called Ground and taxied as the fog began to lift.

No sooner had we reached the taxiway intersection, however, than the fog closed in again and limited visibility to an eighth of a mile. Since the fog often only blankets half the field, leaving half of one of the two intersecting runways clear, we continued to taxi figuring we'd wait at the hold short. As we crossed the off-duty runway we heard someone in an aircraft that had taxied before us report he was back taxiing to his line because of aircraft problems. Ground told him to hold his position, and asked us for our position since they could not see either aircraft. Our front right-seater delayed his answer. He knew we were on the duty runway's parallel taxiway, which was abeam the first short taxiway connecting the two, but he did not have our field diagram readily available, and could not remember the short taxiway's letter designation.

I was in the back and eager to help. While rummaging through my nav bag to find the field diagram, I ventured over the ICS that the small intersection was probably the high-speed delta intersection. When Ground asked our position again, our front right-seater answered with my suggestion. After a short pause, Ground rogered back. No

sooner had he answered than the mission commander sitting next to me in the back said he was fairly sure that wasn't the correct letter designator for where we were.

Meanwhile, Ground cleared the other aircraft to continue to back-taxi along our taxiway toward us, although we couldn't see them.

To head off the head-on, the other pilot suggested we pull off into the short taxiway connecting to the runway. Our front seaters agreed and dutifully told Ground that we'd be stopping on the intersecting taxiway short of the runway until the other aircraft was clear.

Ground rogered our call, and we watched as the other aircraft materialized out of the fog, headed back to his line. At this point, I found the field diagram and, after turning it a couple of times, discovered with a sinking feeling that my guess as to the taxiway designation was way off. In fact, by our report, we were on a high-speed taxiway near the end of the off-duty runway. Although I was sure the front seat did not want to hear from me again, I felt I should come clean. The curt, "Roger," I got on the ICS confirmed my desire to lay low for the rest of the flight.

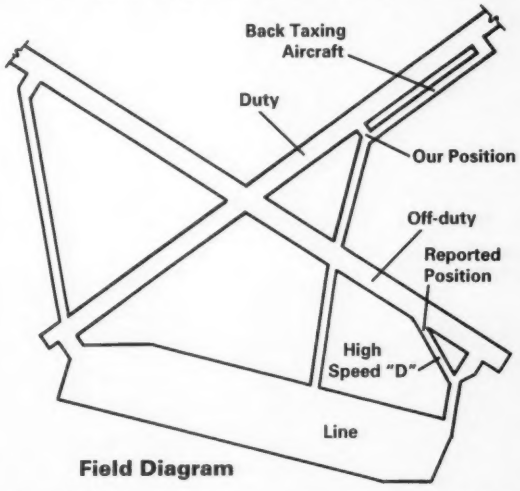
With the other aircraft clear, the pilot and ECMO began discussing how to turn around without fouling the duty and get back onto the parallel taxiway. As if they'd been reading our minds, Ground called and cleared us to taxi down the runway to the taxiway. The front-seaters quickly agreed, but the little voice in the back of my mind started whispering that all was not right.

As I heard the parking brake slide in and the engines wind up, I struggled with my nagging little voice and my desire to maintain a low profile. Finally I voiced my concern that Ground thought we were somewhere else and that we should stop and ask for clarification. Of course my popularity with the front seaters skyrocketed as we came to a stop. I explained that Ground probably cleared us to taxi on the off-duty runway to get us back to the parallel taxiway, which was now behind us, based on the position we'd erroneously given.

After a long pause, the mission commander next to me ventured that Ground probably did know where we were and wanted us to get on the runway, dash to the hold short a thousand feet up, and take off.

I was about to ask that we get confirmation anyway when a C-9 emerged from the fog on his landing rollout, his wing tip passing 20 feet in front of our nose. After considerable silence and a PIREP from the C-9 stating that the fog was not going to get better soon, we called it quits and requested to back-taxi to our line.

So what happened? It was clear in hindsight that Ground took us at our word and thought we were on the high-speed delta (see diagram). When we called that we would pull up the short taxiway and hold short of the runway to stay clear of the back-taxiing aircraft, Ground interpreted this to mean we were holding short of the off duty, waiting for the other aircraft to cross it on the way back to their line. Once Ground knew the other aircraft was clear of the off-duty, they cleared us to taxi from the high-speed delta intersection down the (off-duty) runway to the taxiway leading to the active runway's hold-short.



Field Diagram

As unbelievable as it now seems, we almost taxied onto the active runway and into a nasty mishap. With visibility at a minimum, the C-9 would not have had time to avoid our jet on the runway. Even taxiing around homeplate can be risky and requires just as much attention as any other phase of flight.

In wanting to help and engaging mouth before brain, I clouded our SA and started a chain of events rolling that almost ended with a mishap. As a back-seater during a routine taxi, I should have let the folks up front build and maintain their own SA.

Most of us have been victims of "back seat driving" in an automobile at some point, and it's just as annoying in a multiseat aircraft. Annoyance kills crew coordination by building a wall between crew members. In the end, it increases the likelihood that someone will leave something important unsaid rather than bother another crew member.

There was a good deal of internal pressure not to say anything when I started to feel that Ground thought we were somewhere else. It was only because speaking up when in doubt was hammered into me in the training command, the FRS, and my squadron that I voiced another potentially annoying comment.

Lt. Botkin is an ECMO with VAQ-138.

Two Down and One Gone

By LCdr. Mark Molidor

I was a replacement pilot in VF-101 bouncing for the boat. It was our fifth period of FCLPs at Fentress and most replacement pilots felt comfortable with the pattern. I had been doing fine up to this point and the FRS let a replacement RIO go in my back seat to give the instructor RIO a break from his arduous midnight duties.

On the seventh pass, I flew the ball all the way to touchdown with a slight right-to-left drift. As I touched down, out of the corner of my eye I saw sparks underneath the left wing and felt the plane dip slightly to the left. I immediately went to full power and climbed away from the ground. I was scared and looked at my engine instruments; everything seemed normal. All I could think of at the time was that I must have drifted so far left that I hit the fresnel lens. The LSO didn't say a word to me until I got to the upwind numbers. He said that he saw sparks on touchdown, and to check my hook and engine instruments. Just as he was saying that, my combined-side hydraulics started fluctuating. Since I was already established downwind, I decided to land right away at Fentress instead of returning to Oceana.

The bi-di picked up the left side hydraulics for a couple of seconds then went to zero. I shut off the bi-di while the aircraft simultaneously started to porpoise (the aux-flaps were cycling up because of a loss of combined fluid). I was scared—we were at 1,000 feet, on a black night, with a nugget in the back seat not saying a word (this is where we needed crew coordination, one of the strengths of the F-14).

The LSO had the other Toms go into a delta-easy and turned up the runway lights. I turned final doing a quick landing checklist and dropped the hook. Flying the ball all the way to touchdown was easy this time, until rubber met pavement and I felt a pronounced left list.

I brought the throttles back to idle and waited for the tug that told me I'd trapped. Nothing. I had started in the middle of the runway and was slowly veering towards the left.

Once again, the adrenalin flowed as I clicked nosewheel steering on to keep me from going off the runway (you lose NWS with a total combined failure). I couldn't figure out what was happening. I kept telling my RIO that we were going to go off the runway but not to eject.

Two thousand feet from the approach end, the Tomcat slid off.the runway. Fortunately, it had been raining on and off all week and the ground was soft. We slid another 1,000 feet or so, when the left side of the plane suddenly dug into the ground, making the jet pivot 90 degrees to the left, tipping it approximately 45-50 degrees right wing down and digging up a huge piece of real estate with the right wing.

When we stopped, we quickly opened the canopy and got out. Two hours later, after giving blood, I got to go home to think about the whole experience.

It turned out that the left oleo had developed a stress crack half way up the strut. There was no way to see it on preflight because with weight-on-wheels it was hidden beneath the sleeve. When the crack ultimately fractured that night, the oleo snapped in half, taking the scissors assembly with it. The tire and oleo actually bounced 3,200 feet down the runway before coming to a stop. Unknown to me or the LSO, as I tried to trap, the stub that was left on the aircraft sliced the arresting wire like a piece of yarn. The 90-degree pivot on the ground was caused by the left stub finally digging in so deep that the aircraft stopped and pivoted around the stub, causing the right wing to dig in at about a 45-degree angle. ◀

LCdr. Molidor flies the F-14B with VF-142.

By Lt. David A. Goodman

"Go Down! Go Down!"

We can all probably rattle off the sayings we are taught in training. "Never assume anything", "Complacency kills", and "Maintain a solid lookout doctrine" are just a few of the all-time favorites. All three apply to an experience I had in the Arabian Gulf.

It was just another glorious, hot, summer day. Our crew was scheduled for the mid-day launch, and we were now busy, slowly boiling in our own juices in our Prowler. We were providing jamming support for a section of F/A-18s flying against F-15s. I was looking forward to being ECMO 1 for this flight, since it would be my first time facing F-15s. Finally, when we looked well done, they broke us down and we headed for the cat.

After a solid shot, we cleaned up and started a climbing turn west, heading for the beach. We passed by the mid-Gulf tanker track, but did not see the KC-135 we knew was on station there. Our playmates were getting a quick gulp of gas and would meet us in the area.

We called the F-15s after our rendezvous with the Hornets, and flew several runs against them. The training was over too soon, and we joined up on the Hornets for the short flight back to the ship.

Checking through Bahrain Center at FL200, the flight turned east to a sweet lock on Mother. Looking at the Hornets on our left, my pilot and I saw the Air Force tanker heading west, 1,000 feet below and three miles off. We decided to break off the Hornets and head back to the ship as a single. After kissing them off, we started a slow descending right turn to the southeast.

Approaching 19,000 feet, my pilot and I were both looking forward and to the right, when something just did not feel right to me. A quick look inside the cockpit showed nothing was wrong, and looking outside to the left I did not see anything. Something still did not feel right, so I leaned forward and looked left again. Out from behind the canopy rail loomed a KC-135 and two fighters, co-altitude and nose on at less than half a mile!

I mashed the ICS button down and stammered, "Go down! Go down!" My pilot reacted instantly, jamming the stick forward. We dropped like a stone as the killer tanker and company flew right through where we would have been!

Later, back at the boat, we reviewed our near midair in the debrief. We had known we were near the tanker track, but had seen the tanker going the other way. We assumed there was only one tanker, as was usual, and we knew he was behind us. That assumption almost got us an interservice kiss-of-death. Our front-cockpit lookout doctrine had also broken down in the turn, allowing the tanker to get much too close before we picked him up.

On the plus side, our crew coordination in getting out of the situation was very good. My pilot reacted instantly to my non-standard call to descend. He never looked outside to confirm why I wanted to descend; he just did it. That trust probably saved our lives. We have since standardized our calls in the front cockpit, and developed a solid lookout doctrine. ◀

Lt. Goodman flies with VAQ-136.

Two Belows Ain't So Bad

By Lt. C.B. Henderson

Peter Mersky

It all started at 2000 the night before my last T-2 instrument hop. I had just finished a debrief when I had a chance to look at the next day's flight schedule. I couldn't believe that I had to be back at the squadron in less than eight hours (an hour before the brief). I copied down all of the information needed to prepare for the flight and headed home. I decided that I would trade breakfast for sleep and woke up at 0330 the next morning. I arrived at the squadron at 0400 and started preparing for my 0500 brief. About 0455 the CDO told me that my instructor was sick and that I was going to be placed on the standby list as is common for the training command.

At 1130 I went into the duty office to see if I could go home. The CDO said to wait until noon; he would try to see if he could get me airborne. All of the other standbys were allowed to leave since more came in to take their place as scheduled.

At noon I checked to see if I could go to lunch, but the CDO told me to stay put. At this point, I was tired and hungry and wished that I hadn't skipped breakfast. I wondered how my kneeboard would taste with ketchup on it.

At 1530 I went to the CDO and explained my situation: I'd had a late flight the night before, arrived at the squadron at 0400, hadn't had lunch or breakfast. If I stayed longer, I wouldn't be anything but baggage in the plane. He told me to stay there—I couldn't secure until I was told. Being a student with the possibility of having this guy as an instructor, I decided not to press the issue.

At 1545 he said that I would have a 1700 brief for a 1900 launch and the pilot would be from the wing. The brief went as scheduled and I explained my situation to my pilot. He said that he really wanted to fly, but would let me decide whether I flew the hop. Well, I made a bad decision that day.

Preflight and takeoff went well, but the trouble began during the flight. I was behind the aircraft almost the entire flight, making bad radio calls. I knew that I had my work cut out for me and I found it hard to concentrate on tasks at hand. We were approaching the end of the flight when I made a big mistake: I had the pilot hold on the wrong radial with the wrong turns. I discovered my error after one turn in holding. (I was looking on the wrong page of the approach plate.) My pilot didn't notice my error because he, too, was on the wrong page. Once we realized my error we shot the approach and landed uneventfully. The possibilities are endless as to what could have happened.

In the debrief, I found out that my pilot had been at work since 0530 that morning and that he was also more than tired. Luckily, I only suffered two belows on my grades and lost pride. It could have been much worse. ◄

Lt. Henderson flies with VS-29.

BRAVO ZULU

Left to right: Lt. Sid Wegert, Lt. Jamie Counter, Cdr. Justin Wallace, Ltjg. Brent George

Cdr. Justin Wallace
Lt. Sid Wegert
Lt. Jamie Counter
Ltjg. Brent George
VAQ-131

Immediately after a night cat shot from USS *Ranger* (CV 61) in the Arabian Gulf, Lt. Wegert (pilot) noticed that his EA-6B was climbing at a steeper-than-usual attitude. While trying to get the aircraft's nose in the proper attitude, he raised the gear. Lt. Counter (ECMO 1) scanned the cockpit instruments and confirmed that there were no other problems.

With the landing gear up-and-locked, Lt. Wegert countered the extreme nose-up pitch with forward stick and full nose-down trim. As the Prowler climbed through 2,500 feet, he retracted the flaps and slats. Glancing down at the pitch-trim gauge, Lt. Wegert noticed that the needle was passing through 10 units. Before he could tell Lt. Counter what was happening, and before either of them could reach the circuit breakers behind them, the pitch-trim needle ran past the upper limit of 12 units and stopped.

Lt. Counter called the ship, told them about the problem, and asked for a squadron representative. Orbiting overhead, with the pitch trim stuck full nose up, Lt. Wegert needed both hands to maintain level flight. While Ltjg. George (ECMO 3) checked the PCL, Cdr. Wallace (ECMO 2) talked to the squadron rep.

The crew completed the emergency procedures in the PCL without regaining control of the pitch-trim system. The pitch trim remained full nose up. NATOPS does not address a CV landing with this particular malfunction.

The crew decided to dump to max landing weight, saving enough fuel for a divert, and checked out how the aircraft handled at slow speed. In a dirty configuration, the Prowler still required two-hand forward pressure on the stick for level flight. If Lt. Wegert released pressure on the stick, the aircraft suddenly pitched up into buffet, activating the stall-warning horn.

The ship told them to divert and they headed to a nearby field. Lt. Wegert flew a straight-in to an unfamiliar foreign airfield, using both hands to keep the Prowler on deck during most of the rollout.

Faulty wiring in the control stick caused the pitch-trim actuator rod to run away in the full nose-up direction, jamming itself into an adjacent avionics box. ◄

Left to right: LCdr. John Roberti, Lt. William Gross, AW3 Arjuna Fields

LCdr. John Roberti
Lt. William Gross
AW3 Arjuna Fields
HSL-34

While flying a surveillance mission on a moonless night, this SH-2F crew experienced an uncommanded engine shutdown. Turning toward USS *Jack Williams* (FFG 24) about 25 nm away the crew completed the NATOPS procedures.

LCdr. Roberti did not attempt a restart because there were no cockpit indications as to why the engine failed. In preparation for a difficult single-engine approach to a pitching deck on a night with no horizon, the crew dumped fuel and reviewed NATOPS.

The ship's crew set 40 knots of wind across the deck and cleared the SH-2F for the approach. LCdr. Roberti flew a single-engine approach to a no-hover landing.

Investigation revealed that an accessory gearbox had failed, causing the engine to shut down. ◄

Left to right: Ens. Robert Moore, LCdr. Gary Lemming, Ens. Donald Chomiak

LCdr. Gary Lemming
Ens. Robert Moore
Ens. Donald Chomiak
VT-31

The crew of Montana 857 launched at sunset for night familiarization training. Midway through the hop, during touch-and-goes at an OLF, LCdr. Lemming felt that rotation didn't seem normal. Suspecting a gear malfunction, he and Ens. Moore reviewed NATOPS. The crew in another T-44 from VT-31 saw a main-landing-gear wheel assembly on the side of the runway.

Several low passes confirmed that 857's starboard main mount was gone. NATOPS procedures recommend landing gear up when all gear is not available. The indicator showed that all wheels were down-and-locked, but the right squat switch was falsely sensing weight on wheels, thereby preventing retraction.

The crew of 857 was forced to accept the gear configuration they had: left main and nosegear down-and-locked, and stubbed right strut extended-and-locked.

Ens. Chomiak again reviewed NATOPS aloud as LCdr. Lemming flew and coordinated the positioning of the crash crew on the runway and crew egress after landing.

LCdr. Lemming touched down and the right strut lowered at approximately 60 KIAS. LCdr. Lemming secured the engines to prevent more damage and used the remaining brake to provide control, stopping the aircraft on centerline within 4,000 feet. Damage was limited to Class C. Investigation showed that the right torque knee had failed from stress and corrosion. ◀

Capt. Steve Boone, USMCR
Maj. Stan Surratt, USMCR
VMA-124

While on a low-level nav hop, Capt. Boone found himself amidst a flock of birds, one of which struck his A-4M. The bird shattered the left quarter panel, spraying glass, blood, bones and other debris throughout the cockpit. The left part of the glareshield collapsed and most of the debris hit the pilot, ripping his oxygen mask loose and injuring his left shoulder and arm.

Disoriented by the birdstrike and the 430-knot wind blast, Capt. Boone climbed and slowed the aircraft. With some effort, he reconnected his oxygen mask and tried to call his wingman, Maj. Surratt. However, he found that he had lost communications. Capt. Boone wiped the bird debris from his instruments and headed toward NAS Memphis, 70 miles away.

Maj. Surratt quickly recognized the problem and joined on Capt. Boone's aircraft. As he checked the other A-4, Maj. Surratt noted hits on the left intake and wing, which meant the engine might be FODed. Using pre-briefed crew coordination procedures, Maj. Surratt relayed emergency information to home base and ATC, while closely monitoring Capt. Boone's crippled aircraft.

Thirty miles from NAS Memphis, Capt. Boone made a slow-speed check and determined that he could land safely. After a precautionary approach and landing, Capt. Boone went to the hospital for treatment of minor cuts and bruises.

An investigation revealed that the bird had indeed gone down the engine, making a six-inch gash in the left intake. ◀

Left to right: Capt. Steve Boone, USMCR; Maj. Stan Surratt, USMCR

BZs require an endorsement from the nominating squadron's CO *and* the appropriate CAG, wing commander, or MAG commander. In the case of helo dets, the CO of the ship will suffice. A 5x7-inch photo of the crew by a squadron aircraft should also accompany the BZ nomination. Please include a squadron telephone number so that we can call with questions.

Patchman on the Flight Deck

By Ltjg. Karl F. Kleiderer

PH2 Mark Kettenhoffen

"This is not my beautiful house. This is not my beautiful wife. How did I get here?" Those words are sung by "The Talking Heads." Their lyrics came to me as I lay in the catwalk.

I was two months into the fleet and feeling oh-so-salty as we headed down the home stretch of our "Around the Horn" cruise. After three incredible South American ports, the end was in sight; San Diego was only 13 days away.

It was a beautiful day for flying, but we were only scheduled for a spare tanker. This would be my first flight with a good friend and I was psyched to show him what a good BN I was.

Following the brief, we ran to the wardroom to grab some lunch. A long line but, hey, we'd have time. After inhaling sliders, we suited up and headed for the flight deck. But on the way out the door, I felt a tap on the shoulder.

"Sir, can I buy a patch?" Of course, being a dedicated coffee mess officer, I sold the man a patch. Hmmm, now I was probably late.

I hustled to the flight deck and headed forward, assuming my KA-6D would be parked in its normal spot somewhere in the corral. I walked just forward of the island and searched for old 516. No luck. It must be on the fantail where they occasionally put the tankers. It wasn't back there, either. Just where had they put the thing, anyway?

The incredible noise of turning jets now served more than adequate notice that I was definitely late manning up, even if I was only a spare.

I hurried into flight deck control asking where my airplane was.

"All the way up on the point," the handler said. I was really late now. I hated walking through Tomcat and Hornet exhaust in the six-pack, so I went underneath all the A-6s in the corral. What the heck, I was familiar with them and besides, it was faster. Under one, under two, and ...

The next thing I remembered was looking at water 60 feet down through the holes in the catwalk. I lay there stunned for a minute until the squadron safety CPO arrived, asking if I was OK. I was barely able to answer him.

Apparently an A-6 was pulled forward and in my haste I didn't see it. As luck would have it, he had just powered up to continue taxiing when knucklehead was walking behind it. Now I was really late. The stupidity didn't end there.

I staggered safely to 516 and did a cursory preflight. As I climbed into the cockpit, the pilot asked where I had been and what happened "cause you don't look so good."

"I was blown into the catwalk," I replied.

He shot me a wide-eyed glare back and said I ought to think twice about taking the hop.

"It's only a spare," I thought.

The adrenaline wore off as I sat there watching jet after jet go off the pointy end. Man, my leg hurt. One shoulder was a little sore, too. And my wrist was throbbing. As I realized my hands were shaking, I thought the last thing I wanted to do was go flying. A few short moments later my pilot said, "They're breaking us down." Two minutes later we were airborne.

As I climbed into the cockpit, the pilot asked where I had been and what happened "cause you don't look so good."

We ended up hawking four jets that were low on fuel during blue water ops. I was useless in this demanding environment; my mind still reeled from the incident on the flight deck and my body felt the after-effects. My pilot did a great job keeping the bubble and we recovered uneventfully.

I was greeted with a ration of deserved laughter upon entering the ready room, but there are many points to glean from this litany of errors.

First, once the brief is over and the gear is on, your mind should be on the mission at hand (not selling patches). Second, the flight deck is no place to be in a hurry. Always look at everything going on around you. Tunnel vision up there will hurt you sooner or later. Ten feet further forward and I would have been blown over the side; 10 feet closer and I would have been wrapped around an antenna. I escaped with minor bumps and bruises.

Third, your gear should be zipped up and tightened down before you get to the flight deck. Mine was, but how often do you see someone buttoning up their SV-2 just before climbing into the cockpit? If you're blown over the side, is it going to help you after a 60-foot fall into cold water?

Lastly, a rule we've heard from day one in aviation: "If you're not ready to fly, then don't." I obviously wasn't in a position to go flying, but convinced myself that it was a spare and I would hack it. ◀

Ltjg. Kleiderer is a BN with VA-52.

ANYMOUSE

TFOAs and Hazard Reports

"The Hazards of the System" (March '92) really nails down the primary flaw in hazard reporting: commanders won't put themselves on report! This problem also occurs in NAMDRP reports, especially in the Marine Corps. I'm impressed by how many Navy units submit TFOA-related reports, especially maintenance-related TFOAs.

If we could total a year's worth of NAMDRP reports, I'd bet that the percentage of TFOAs for Marine squadrons would be near zero. I'd also bet that there is more than one QA chief ready to eliminate his NAMDRP MI because another TFOA message was written but not sent.

It's probable that a similar TFOA occurred later in another unit because those canceled messages were not available to remind people of what can happen. See if these unreported TFOAs from our squadron happened in other units.

– January: a pilot noticed door No. 6 open on takeoff (he saw it over the edge of the LEX) and made an emergency landing. The door fell off on the landing rollout. The door latches were not secured before takeoff.

– February: an aircraft returned from a cross-country with door No. 8 open and the fuel cap missing. Luckily, the cap missed the right intake after bouncing off the centerline tank. The pilot didn't check the aircraft after servicing during his trip.

– April: the aircraft returned with a hung bomb. The ordnance hung up because of a loose forward breech cap and a missing aft breech cap (with CAD installed). Both caps were lost over foreign soil. Hope it rains good before some innocent soul picks up those explosive devices. The desk determined that the load was "safed for flight."

These reports were nixed by our CO and group commander. This mouse is ready to quit supporting programs that our command doesn't support.

QAmouse

This mouse brings up two disturbing points. First, that not all the fleet is on board with the spirit, intent and requirement of reporting TFOAs as dictated by 4790.2E. Second, a lack of communication at all levels of a command can have serious consequences.

Reporting TFOAs is mandatory, and rightly so for two reasons. First, the report warns the system that a libelous incident (e.g., the door falls off and hits someone's house) has occurred. Second, the report draws attention to the hazard so it can hopefully be remedied.

Yes, someone has to be first. However, if there is a second, third or fourth incident, a design problem has probably been discovered. But we can't track problem areas if the players don't 'fess up.

Lack of communication is a more serious problem because it may cause the experts we trust to "keep 'em flying" to not do their jobs completely.

When a command pulls or cancels correspondence of a non-routine nature, it needs to tell the author why. A two-minute discussion prevents misunderstandings, spares feelings and is common courtesy. Command climate in any unit is directly related to the quality of interpersonal communications within the unit. – Ed.

CH-53s Turning on the Flight Deck. Anyone for PT?

The lack of safety precautions aboard my carrier during helicopter flight operations has become unbearable. The hazards have been described to the Air Boss, flight-deck personnel and in our local Anymouse system – nothing has changed. Safety hazards are not a problem during fixed-wing operations, only when the helicopters are using the deck.

Recently, while a CH-53D finished its final-control checks (at 100 percent) before launching, people were doing PT and a FOD walkdown was in progress. None of the people doing PT were wearing hearing or eye protection or float coats. The people on FOD walkdown had a mix of protection, but no one was wearing a cranial properly. The crew chief of the CH-53D actually had to *stop* the FOD walkers from walking under the rotor arc.

While the same helicopter was conducting an external check, several other people on the flight deck warned the flight-deck coordinators and LSEs to secure a lid on a blade can (approximately 100 pounds). Their quick fix was to stand on the lid.

After the CH-53D left the pattern, everyone except one sailor got off the blade can. The VERTREP H-46 came in and blew the lid off. It glanced off the sailor's head as he fell to the deck. Fortunately, he was wearing his cranial. The lid wrapped around the front of a folded H-53.

Although no one was seriously injured, the sailor could have easily been decapitated or an aircraft could have been damaged. The frightening thing is that all these incidents happened within 45 minutes.

If I had seen a change for the better in the attitude aboard ship during work-ups and during the past month, I wouldn't be writing. But the ship doesn't seem to take seriously the dangers of operating helicopters.

Helohazardmouse

LETTERS

Re: "Fire in the Pits" (June '93)

Virginia Beach, VA – One of my little pleasures in life since retiring is receiving and reading the best safety publication in the world. *Approach* has consistently scored 10s with every edition. While I read the June issue, the sadness and tragedy of a naval mishap came close to home. The jolt of recognizing a mishap photograph and reading this article was a sobering experience since I was the Naval Safety Center investigator assigned to conduct the investigation of that particular mishap. Your article and analysis of findings was right on target. There were, however, some facts that needed amplification and are critical to understanding the identified hazards and corrective actions. The chain of events contains several links that need clarification.

The final phase of the mishap sequence actually started with the refueling operation of the A-6 that went through the pits immediately before the mishap aircraft. Slots in that aircraft's refueling nozzle adapter (onto which the refueling nozzle attaches) were found to be so badly worn that built-in nozzle safety interlocks (collar-lock pins in the refueling nozzle) could be unintentionally disabled if the manufacturer's instructions for attaching and removing the nozzle were not followed exactly (which they weren't). The mishap refueling nozzle was improperly configured for operation; thus the difficulty in attaching the refueling nozzle to the mishap aircraft.

A no-go gauge, developed by the Naval Air Propulsion Center, Trenton, NJ, is available to each squadron. This gauge accurately determines whether wear limits in the fuel-nozzle adapter slots have been exceeded.

As the *Approach* article said, training on the proper use of the J.C. Carter nozzle is critical to safe refueling. Short-cuts in removing the nozzle after refueling – such as letting the nozzle collar rotate and close the poppet valve instead of first physically closing the poppet valve before removing the nozzle – now bring the worn nozzle adapter slots into play.

With the poppet valve closed by the camming action of the nozzle collar, the worn adapter slots can let the nozzle be removed *before* the collar locking pins have seated. The detached collar is *not locked* and may be rotated by hand or other means. Further, the poppet valve is not locked closed. Any application of fuel pressure to the hose can cause the collar to rotate, poppet valve to open, and fuel to gush out onto whoever and whatever is around. (And it did)

The "Daddy is going to take me flying" syndrome and its corollary, "Just sit back and enjoy the ride," must never enter naval aviation. Contingency briefings that cover emergencies during each phase of operation *must* be given before each flight. These briefings should include ground operations as well as in-flight. Misunderstandings lead to unneccessary ejections instead of emergency ground egress.

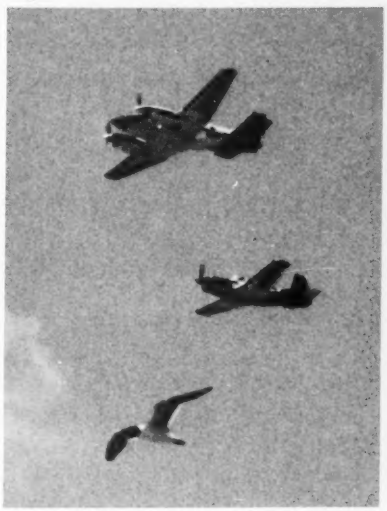
What does "zero-zero" really mean? Zero altitude? OK, as long as aircraft sink-rate is taken into consideration. Zero airspeed? Maybe. It depends upon your definition of airspeed. If you're talking about aircraft-generated movement through the air, then the definition is incomplete. Aircraft movement on deck, and even more critically, local winds, must be considered.

A tail wind factored into the equation for this mishap. Remember, the local on-deck weather conditions are just as important as the weather forecasts for the inflight portion of the mission. Oh, by the way, there are other zeros that need to be considered: zero-pitch and zero-roll aircraft attitude. How many zeros do we have now? Altitude, sink rate, airspeed, wind (no tailwind allowed), pitch (aircraft attitude), and roll (aircraft attitude).

These are the parameters for which vintage ejection seats are designed, built, and tested. If it does not have all six zeros, then the seat is *not zero-zero.*

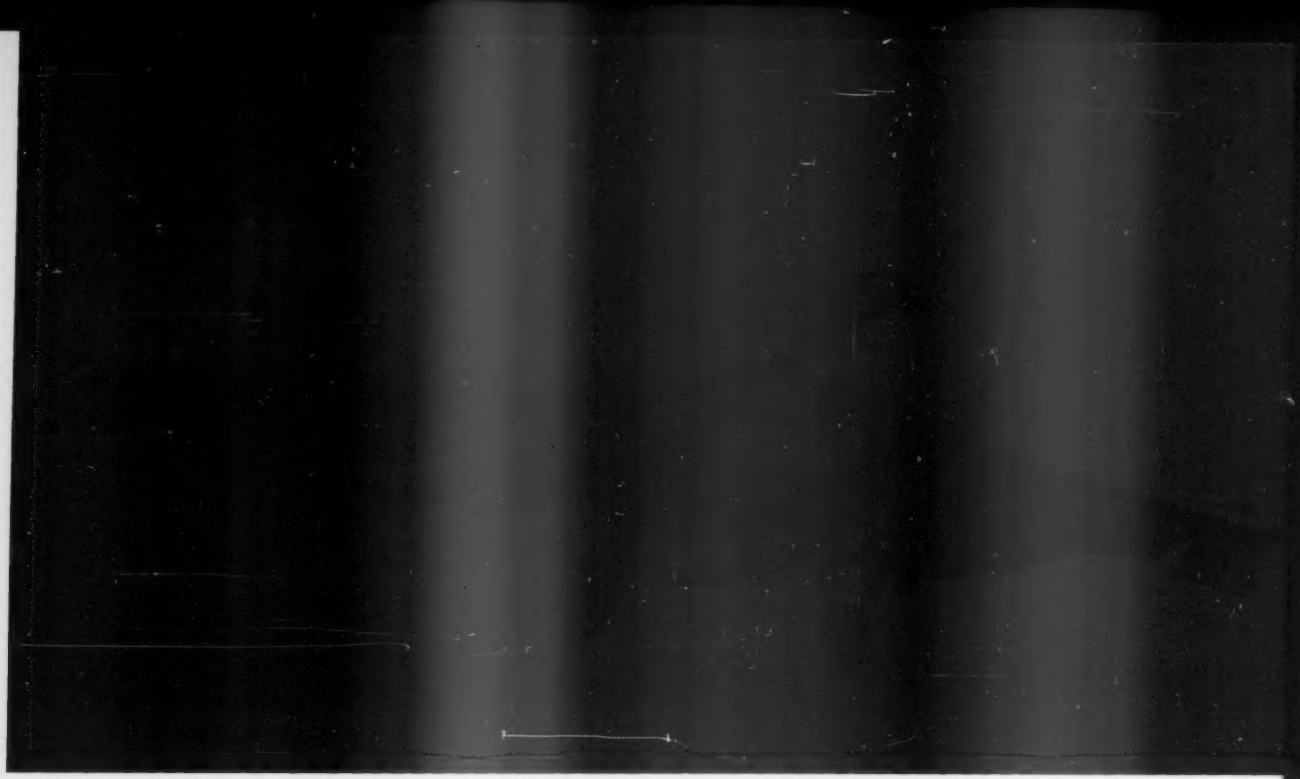
LCdr. W.D. Bankart, USN (Ret)

Thanks for the kudos and comments, W.D. LCdr. Bankart spent more than 21 years in the Navy as a RIO in F-4s and F-14s. He also served eight years as an aircraft mishap investigator (three years as head of investigation) for the Naval Safety Center. Following retirement, he worked as an F-14 contract simulator instructor at NAS Oceana and is currently working for the Commonwealth of Virginia as a Safety Engineer.—Ed.



Re: "War Bird – Giant Sparrow Attacks Plane" (April-May '93)

In the spirit of cooperation (and to decrease airplane strikes), the 332nd Seagull Wing has agreed to comply with NAS Corpus Christi's course rules. Here a member of the Black-headed Gulls practices some dissimilar form. – Ed.



PH1 Michael D.P. Flynn

A Little Deedle May Save You

By Lt. Leo Kiernan

The mission sounded simple enough: a typical overhead night tanker during the first few weeks of ATA. Tank the Hornets, then hold overhead for practice plugs for all interested parties. I considered myself kind of salty. I had completed a two-month, around-the-Horn mini-cruise and now found myself knee-deep in ATA off the California coast. With 30 fleet traps under my belt, I thought I could handle any situation around the ol' boat.

The brief was the standard pre-tankex discussion, covering who needed the gas, when they needed it, the hawk pattern, and night recovery. We had just enough time to eat and walk.

Everything went normally right up until the overhead join-up with the off-going tanker. The weather guesser predicted scattered showers; what we found was solid IMC with rain and thunderstorms from 6,000 feet up to FL220. The join-up on the off-going tanker was spectacular, going in and out of clouds and heavy rain. I was already sweating by the time I took my 4,000 pounds of gas and was ready to just hang out.

We managed to find a relatively clear area around 4,000 feet overhead mother—just what we needed to gas our customers and send them on their way. We thought we had it made for the cycle when the ship drove into an area of solid rain and thunderstorms. Suddenly our little sanctuary at 4,000 feet turned into an IMC nightmare. We had reports of solid weather up to FL220 in the entire area around the ship. We elected to descend to our minimum TACPRO tanking altitude of 3,000 feet in hopes of breaking out.

As I set the radalt at 2,500 feet, we began to descend hoping for clearer weather. We began to break out right at 3,000 feet. As luck would have it, at the same time there was a Hornet on the ball on his bingo pass. CATCC told us to hawk the Hornet at three miles. We rolled in behind the F/A-18, dodging clouds and rain squalls all the way.

"Bolter, bolter, your signal is tank," the controller called. Well, here we go, time to give one of our air wing buds some gas on his night in the barrel.

The initial setup looked good. We were crossing the angle as the Hornet came off the deck, but in the poor visibility he missed us. I turned hard, evading the goo as I looked for the F/A-18. CATCC jumped in and began to provide join-up vectors. I looked right and saw the flashing lights of the Hornet about two miles away. I told CATCC and the Hornet driver that I had a visual and would join on him. CATCC continued to turn the F/A-18 into us.

At the call, with F/A-18 at our 12 o'clock, one-half mile, we went into a solid cloud and I lost sight.

I yelled at my BN, "Where is he? I can't see him!" At that point, I wanted to stop my closure on him, so I increased my left angle of bank and pulled.

Suddenly, the cloud directly in front began to pulsate

with the tell-tale red strobe of the F/A-18. My eyes fixed on the light in front and I instinctively increased my angle of bank. The next thing I heard was the distinctive sound of the radalt's LAWS tone. I snapped back inside the cockpit and noticed that I had increased my angle of bank to 50 degrees and had inadvertently pulled the nose to about seven degrees, nose low. We were rapidly descending.

I immediately rolled wings level and pulled hard, we bottomed out at 500 feet above the water. Pulses racing, we began the climb back to 3,000 feet. We called CATCC and told them what we should have said a long time before—that there was no suitable tanking altitude above mother. The Hornet, unable to locate us at 500 feet to tank, had been diverted.

Later, as my BN and I ate midrats in the forward wardroom, we discussed what had led to a breakdown in our collective scans. Obsessed with saving the Hornet from having to divert, we allowed ourselves to do something wrong.

We should have never let CATCC vector us once we saw the Hornet, nor should we have even considered tanking in such weather. We were glad that we followed air wing tacnote and squadron SOP, which set the lowest night-tanking altitude at 3,000 feet. We were definitely tempted to press lower to avoid the weather in the hawk pattern. If we had, the radalt deedle that saved me in this case probably would have been too little, too late, and I doubt I'd be around to tell the story. ◀

Lt. Kiernan is a pilot with VA-95.

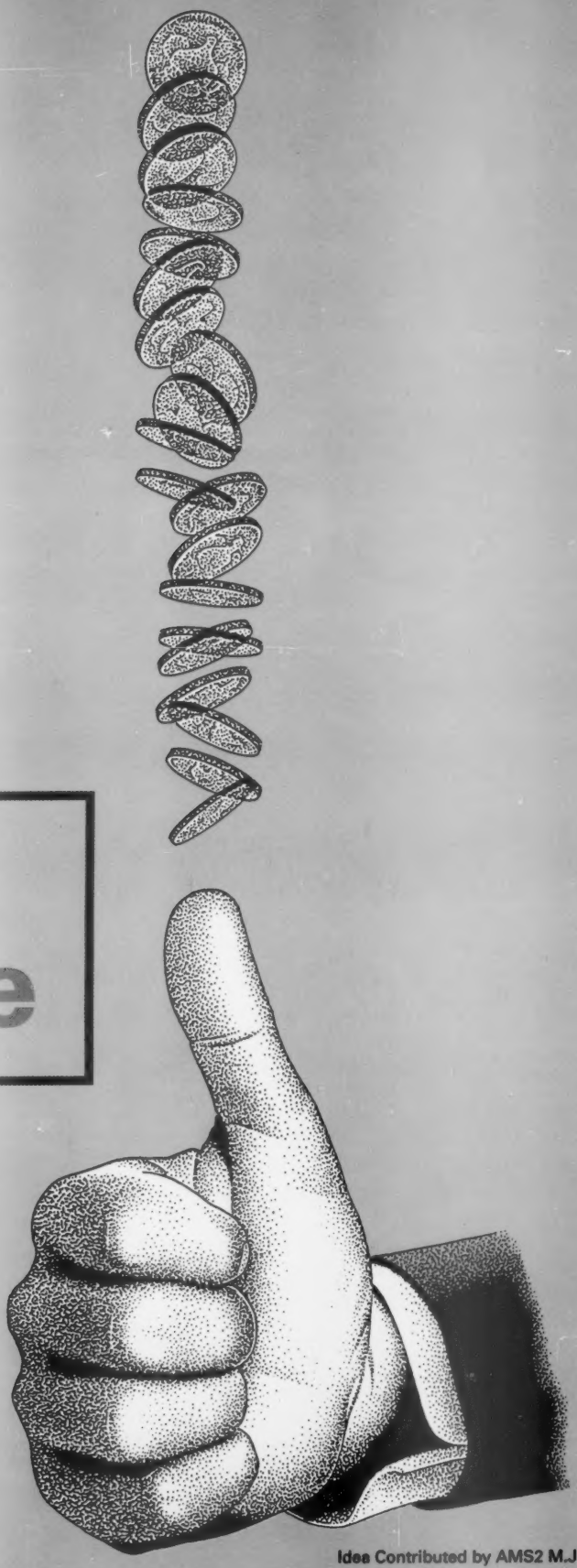
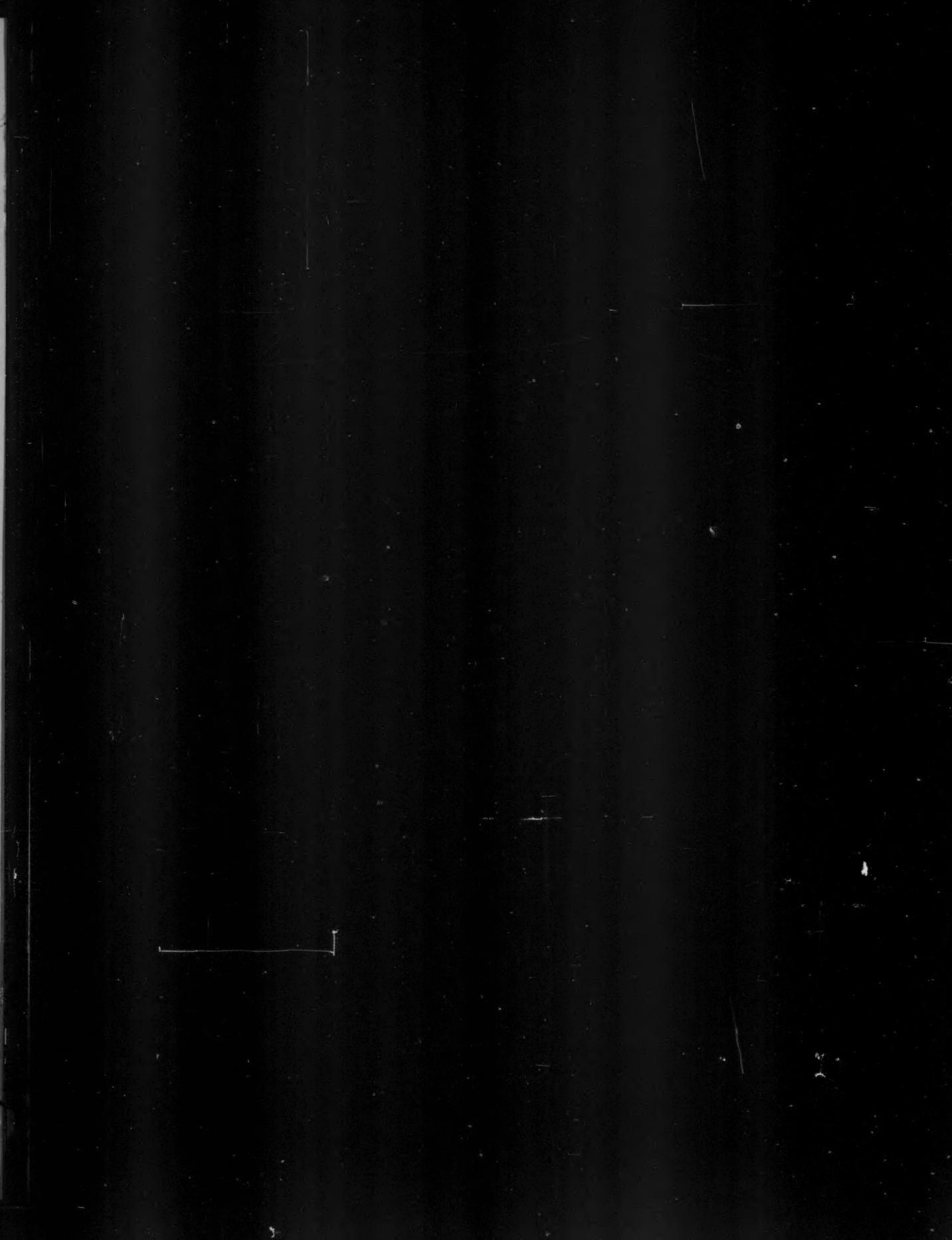
Vultures' Row

This list includes Flight, Flight Related and Ground Class A Mishaps.
Classifications and descriptions are subject to change.

DATE	PLATFORM	COMMAND	DAY; NIGHT	FATAL	FLIGHT REGIME; LOCATION
1 Oct	F/A-18B	NATC PAX	D	1 civ	Approach wave-off; Pax River, MD
4 Oct	AH-1W	HMM-365	D	1	Hot-refueling (AGM); At sea
13 Oct	HH-1N	VXE-6	D	3 (2 civ)	En route; Antarctica
16 Oct	F-14A	VF-302	D	0	ACM; Key West, FL
20 Oct	CH-46E	HMM-262	N	0	Night taxi attempted takeoff; MCAS Futenma, Okinawa
28 Oct	A-4M	FIT WEPS School	D	0	Simulated strike; 45nm from Yuma, AZ
1 Nov	F/A-18D	VMFA (AW)-225	D	0	High-speed abort; 29 Palms, AZ
3 Nov	EA-6B	VAQ-129	D	3	Takeoff; El Centro, CA
4 Nov	CH-53E	HMM-261	N	5	NVG ship ops; At sea
8 Nov	CH-46D	HC-11	D	0	Vertrep; At sea
22 Nov	F/A-18A	VFA-97	N	0	Night catapult; At sea
25 Nov	T-2C	VT-23	D	0	Single-engine approach; Kingsville, TX
9 Dec	AV-8B	VMA-214	D	0	En route; Yuma, AZ
15 Dec	F-14A	VF-33	D	0	ACM; Oceana Op Area
17 Dec	F-16N	VF-126	D	1	Climb out; Idaho Falls, ID
22 Dec	LC-130F	VXE-6	D	0	Landing; Antarctica (not USN)
23 Dec	F-14A	VF-201	D	1	ACM; Dallas, TX
18 Jan	F-14A	VF-101	D	0	ACM; Key West, FL
25 Jan	F-14A	VF-24	N	0	FCLP; NAS Miramar, CA
13 Feb	CH-53D	HMH-363	N	0	Unaided external lifts; Somalia
15 Mar	F-14B	VF-101	D	2	Pilot fam; N. Carolina Coast
21 Mar	SH-2F	HSL-37	N	3	SSC; At sea
22 Mar	A-6E	VA-85	N	0	Takeoff; Fallon, NV
22 Mar	CH-53D	HMH-463	D	0	PMFCF; MCAS Kanehoe, HI
26 Mar	E-2C	VAW-124	N	5	Foul-deck waveoff; At sea
13 Apr	F-14D	VF-11	N	0	FCLP; San Clemente Is., CA
14 Apr	A-6E	VA-95	D	0	Mid-air collision with civ. acft. (low level); WA
14 Apr	SH-2F	HSL-32	D	0	ASW; At sea
21 Apr	A-6E	VA-34	N	2	Rdvz, mid-air; Nellis Range, NV
23 Apr	SH-2F	HSL-33	D	0	Landing; Bakersfield, CA
27 Apr	H-46D	MCAS	N	0	En route; Beaufort, SC
29 Apr	F-14A	VF-21	D	0	ACM; Atsugi, Japan
12 May	AV-8B	VMA-211	D	0	En route; Yuma, AZ
19 May	VH-60	HMX-1	D	4	PMCF; La Plata, MD
21 May	F/A-18C	VFA-151	D	0	ACM; Lone Pine, CA
4 Jun	F-14A	VF-302	D	1	ACM; SoCal Op Area
11 Jun	ES-3A	NAWC	D	1	Maintenance (AGM); Pax River, MD
15 Jun	SH-60F	HS-10	D	1	PMCF; Imperial Beach, CA
17 Jun	EA-6B	VMAQ-2	D	0	Takeoff; Cherry Point, NC
22 Jun	F/A-18A	MAG-42	D	1	ACM; Yuma, AZ
25 Jun	TA-4J	VT-22	D	0	Landing; Corpus Christi, TX

Naval aviation is not a game of chance.

Don't gamble



Idea Contributed by AMS2 M.J. Galusha